

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue Seattle, WA 98101

Reply To
Attn Of: OW-135

12 JAN 2005

David C. Peeler, Program Manager Washington Department of Ecology P. O. Box 47600 Olympia, Washington 98504-7600

Re:

EPA Review of the 2003 Revisions to the Washington Water Quality Standards

Regulations

Dear Mr. Peeler:

The Environmental Protection Agency (EPA) has completed a review of portions of the 2003 revisions to the Washington water quality standards regulations. We conducted our review pursuant to our authority under Section 303(c) of the Clean Water Act and the implementing regulations at 40 CFR 131.5 and 131.21. EPA is approving many of the 2003 WQS revisions that were reviewed. The attached enclosure provides clarification about the provisions EPA approved, and the items that EPA is taking not taking action on.

At this time, EPA is not taking action on the remainder of the provisions in the State's water quality standards package because we need additional time to complete our internal evaluation as well as tribal consultation, and endangered species and essential fish habitat consultation.

We appreciate the efforts of your staff to coordinate this action with EPA throughout the WQS revisions process. Please feel free to contact me at (206) 553-7151 or Kathleen Collins at (206) 553-2108.

Sincerely

Mike Gearheard

Director

Office of Water

**Enclosure** 

cc: Melissa Gildersleeve, Washington DOE

Fran Wilshusen, Northwest Indian Fisheries Commission

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#### I. INTRODUCTION

The Washington Department of Ecology adopted, and submitted to EPA, its 2003 Water Quality Standards (WQS) regulations revisions. The WQS package contained the specific revisions to the regulatory language at WAC 173-201A, the Lt. Governor's certification that the revisions were duly adopted in accordance with State law, a summary of the changes made to the States water quality standards, the States response to comments document, and technical reports. The focus of this action is to provide EPA's determination on some of the provisions in the package, including the following:

- Recreational uses and criteria, fresh water
- Water supply uses, fresh water
- Miscellaneous uses, fresh water
- Lake nutrient criteria
- Radioactive substances
- Toxics and aesthetics narrative
- Variance procedures
- Site specific criteria
- Use attainability analysis
- Water quality offsets
- Recreational, water supply, and miscellaneous uses for water bodies in Table 602

The technical justification for EPA's determinations are discussed in part II of this enclosure.

EPA's approval action is considered a federal action which is subject to the Section 7 consultation requirements of the Endangered Species Act (ESA) as well as Essential Fish Habitat (EFH) consultation requirements under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). These requirements are discussed in more detail in part III of this enclosure.

#### II. TECHNICAL JUSTIFICATION

The following provides each of the water quality standard provisions that EPA reviewed, and EPA's determination. The underlined language in each water quality standard provision denotes that the language is either new, revised, or reformatted; language that is not underlined was in the 1997 water quality standards and has not changed, it is included here to provide context for the overall provision.

#### A. RECREATIONAL USES AND CRITERIA

#### 1. WAC 173-201A-020 Definitions.

NON SUBSTANTIVE EDITORIAL OR FORMATTING CHANGE in the July 2003 Water Quality Standards:

"Extraordinary primary contact" means waters providing extraordinary protection against waterborne disease or that serve as tributaries to extraordinary quality shellfish harvesting areas."

EPA ACTION: EPA approves Washington's definition of "extraordinary primary contact" as a non-substantive editorial change from the language contained in the 1997 Water Quality Standards (WQS). This editorial change was a result of formatting changes made to the 2003 WQS and is explained in more detail below. This provision does not result in any change to the use and its associated criteria that EPA previously approved. EPA is acting on this provision to ensure that it is in effect under the Clean Water Act (CWA).

As stated previously, the formatting used to assign beneficial uses to waters has been revised in the 2003 WQS. The 1997 WQS used a "Class" format which assigned each water body to a particular "Class." For example, fresh water had Class AA, Class A, Class B, and Lake Class waters. Each "Class" contained a suite of beneficial uses (i.e, water supply uses, recreational uses, fish and shellfish use, etc.). The 2003 WQS removed the "Class" system and instead applies the beneficial uses that were contained in a "Class" directly to the specific waters contained in each "Class."

In the 1997 WQS, Class AA, Class A, and Lake class each contained a recreational use termed "primary contact". More stringent bacteria criteria were associated with Class AA and Lake Class "primary contact" waters than with Class A "primary contact" waters. Because of the formatting change described above, an editorial change was necessary in the 2003 WQS so that those waters formerly termed as Class AA and Lake Class "primary contact" could be distinguished from those waters formerly termed Class A "primary contact." As a result, in the 2003 WQS, the "primary contact" uses identified in Class AA and Lake Class in the 1997 WQS are now prefaced with the term "extraordinary." All of the criteria associated with these uses terms were previously approved by EPA and in effect in the 1997 WQS.

2. WAC 173-201A-200(2) Recreational uses, and WAC 173-201A-200(2)(a) General Criteria

NON SUBSTANTIVE EDITORIAL OR FORMATTING CHANGE in the July 2003 Water Quality Standards:

(2) Recreational uses. The recreational uses are extraordinary primary contact recreation, primary contact recreation, and secondary contact recreation.

(a) General criteria. General criteria that apply to fresh water recreational uses are described in WAC 173-201A-260 (2)(a) and (b), and are for:

- (i) Toxic, radioactive, and deleterious materials; and
- (ii) Aesthetic values

**EPA ACTION:** EPA approves the recreational uses in WAC 173-201A-200(2) (i.e., extraordinary primary contact recreation, primary contact recreation, and secondary contact recreation) as non-substantive formatting and editorial changes that do not alter the uses of the water quality standards that EPA previously approved, and that were in effect in the 1997 WQS. EPA is acting on this provision to ensure that the editorial changes and reformatted provision are in effect under the CWA.

As stated previously, the 2003 WQS removed the "Class" format and instead applies the beneficial uses that were contained in a "Class" directly to the water body. (See A.1., above). The table below summarizes the "Class" system (and associated recreational use designation and bacteria criteria) used in the 1997 WQS, and the revised "Use Category" system used in the 2003 WQS.

Comparison of the Recreation Uses and Associated Criteria in the 1997 and 2003 WQS					
1997	Water Quality	Standards	2003	Revised Wat	er Quality Standards
Class (Associated use)	Criteria (expressed as colonies/100 mL)		Use Category Criteria (ex	pressed as colonies/100 mL)	
	geometric mean	10% of samples not to exceed		geometric mean	10% of samples not to exceed (if less than 10 samples, no single sample may exceed)
Class AA (primary contact)	50	100	Extraordinary primary contact	50	100
Class A (primary contact)	100	200	Primary contact	100	200
Class B (secondary contact)	200	400	Secondary contact	200	400
Lake Class (primary contact)	50	100	Extraordinary primary contact	50	100

As can be seen from the table above, the recreational use categories in the 2003 WQS are the same as those contained in the 1997 WQS except the use has been re-named. For example, water bodies that were designated as "Class AA (primary contact)" and "Lake Class (primary contact)" in Washington's 1997 WQS have been renamed as "extraordinary primary contact" in the 2003 water quality standards. The actual beneficial use and the criteria designed to protect the use have not changed.

EPA approves the general criteria (WAC 173-201A-200(2)(a)) in this provision as a non-substantive formatting change that does not alter the criteria of the water quality standards that EPA previously approved and that were in effect in the 1997 WQS. In the 1997 WQS these same general criteria applied to all waters where recreational uses occurred. The reformatted 2003 WQS continue to apply to these general criteria to all waters that are protected for recreational use. EPA is acting on this provision to ensure that the reformatted provisions are in effect under the CWA.

### 3. WAC 173-201A-200(2)(b) - Bacteria criteria

SUBSTANTIVE REVISION, AND NON SUBSTANTIVE FORMATTING CHANGE in the July 2003 Water Quality Standards:

(b) Water contact recreation bacteria criteria. Table 200 (2)(b) lists the bacteria criteria to protect water contact recreation in fresh waters.

<u>Table 200(2)(b)</u>

Water Contact Recreation Bacteria Criteria in Fresh Water

Category	Bacteria Indicator		
Extraordinary Primary Contact Recreation	Fecal coliform organism levels <u>must</u> not exceed a geometric mean value of 50 colonies/100 mL, with not more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained for calculating the geometric mean value exceeding 100 colonies/100 mL.		
Primary Contact Recreation	Fecal coliform organism levels <u>must</u> not exceed a geometric mean value of 100 colonies/100 mL, with not more than 10 percent of all samples (or <u>any single sample when less than ten sample points exist</u> ) obtained for calculating the geometric mean value exceeding 200 colonies/100 mL.		
Secondary Contact Recreation	Fecal coliform organism levels <u>must</u> not exceed a geometric mean value of 200 colonies/100 mL, with not more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained for calculating the geometric mean value exceeding 400 colonies/100 mL.		

**EPA ACTION:** This provisions describes the bacteria criteria applicable to recreation uses. EPA approves the new language contained in the criteria in Table 200(2)(b) (i.e., "or any single sample when less than ten sample points exist") as consistent with the

CWA and its implementing regulations under 40 CFR §131.11 because this statement clarifies how to use the criterion associated with "10 percent of all samples" (e.g., 100 colonies/100 mL for extraordinary primary contact) when less than ten samples exists. EPA believes using a single sample when less than 10 samples are available is reasonable.

EPA approves the remainder of the criteria in this provision (i.e., underlined categories of uses in Table 200(2)(b), and the regulatory language in Table 200 (2)(b) that is not underlined) as a non-substantive formatting change (i.e., the uses and criteria are now displayed in table format) that does not alter the uses or the criteria to protect these uses that EPA previously approved, and that were in effect in the 1997 WQS (see A.2. for a comparison of the 1997 WQS and the 2003 WQS). EPA is acting on this provision to ensure that the reformatted provisions are in effect under the CWA.

### 4. WAC 173-201A-200(2)(b)(i) - Averaging narrative

# NON SUBSTANTIVE FORMATTING CHANGE in the July 2003 Water Quality Standards:

(i) When averaging bacteria sample data for comparison to the geometric mean criteria, it is preferable to average by season and include five or more data collection events within each period. Averaging of data collected beyond a thirty-day period, or beyond a specific discharge event under investigation, is not permitted when such averaging would skew the data set so as to mask noncompliance periods. The period of averaging should not exceed twelve months, and should have sample collection dates well distributed throughout the reporting period.

EPA ACTION: EPA is not taking action on the new language (i.e., the underlined language in the first and last sentences) in this provision because it is not a water quality standard under section 303(c) of the Clean Water Act and its implementing regulations at 40 CFR §131.13. This provision does not change the level of protection afforded to Washington's waters. Rather, it provides Washington's preferred method for the averaging period and data collection samples for bacteria; it does not preclude other methodologies from being used.

EPA views the remainder of the underlined language (i.e., the word "is" in the second sentence of the provision) as a minor editorial change that does not alter the substance of the water quality standard that EPA previously approved. Additionally, EPA approves the entire second sentence in this provision as a non-substantive formatting change that does not alter the uses or the criteria to protect these uses that EPA previously approved and that were in effect in the 1997 WQS. With the exception of the word "is", this language is the same as the language that was included in the 1997 WQS at WAC 173-201A-060(3). EPA is acting on this provision to ensure that the reformatted provision is in effect under the CWA.

### 5. WAC 173-201A-200(2)(b)(ii) - Compliance

## NEW LANGUAGE in the July 2003 Water Quality Standards:

(ii) When determining compliance with the bacteria criteria in or around small sensitive areas, such as swimming beaches, it is recommended that multiple samples are taken throughout the area during each visit. Such multiple samples should be arithmetically averaged together (to reduce concerns with low bias when the data is later used in calculating a geometric mean) to reduce sample variability and to create a single representative data point.

EPA ACTION: EPA is not taking action on the new language (i.e., the language that is underlined) in this provision because it is not a water quality standard under section 303(c) of the Clean Water Act and its implementing regulations at 40 CFR §131.13. This provision does not change the level of protection afforded to Washington's waters. Rather, it provides Washington's recommended guidance for compliance determination.

## 6. WAC 173-201A-200(2)(b)(iii)- Establishing more stringent criteria

### NEW LANGUAGE in the July 2003 Water Quality Standards:

(iii) As determined necessary by the department, more stringent bacteria criteria may be established for rivers and streams that cause, or significantly contribute to, the decertification or conditional certification of commercial or recreational shellfish harvest areas, even when the preassigned bacteria criteria for the river or stream are being met.

**EPA ACTION:** EPA is not taking action on this provision because it is not a water quality standard. This provision is simply a general statement that a more stringent site-specific criterion may be authorized at some future date. The Washington Department of Ecology's Responsiveness Summary (*WAC 173-201A Surface Water Quality Standards for the State of Washington*, July 1, 2003) clarified that the State will set site-specific criteria for bacteria in the same way it does for other pollutant parameters. Furthermore, Washington has adopted a provision for developing site-specific criteria, and EPA is approving that provision as consistent with the CWA (for additional information on the site specific criteria provision see part I - Site specific criteria). If Washington develops a site-specific criterion EPA will act on it when the State submits it to EPA for approval.

# 7. WAC 173-201A-200(2)(b)(iv) Alternative indicator bacteria

# NEW LANGUAGE in the July 2003 Water Quality Standards:

(iv) Where information suggests that sample results are due primarily to sources other than warm-blooded animals (e.g., wood waste), alternative indicator criteria may be established on a site-specific basis by the department.

ACTION: EPA is not taking action on this provision because it is not a water quality standard. This provision is simply a general statement that a more stringent site-specific criterion may be authorized at some future date. Washington has adopted a provision for

developing site-specific criteria, and EPA is approving that provision as consistent with the CWA (for additional information on the site specific criteria provision see part I - Site specific criteria). If the state develops a site-specific criterion EPA will act on it when the State submits it to EPA for approval.

### B. WATER SUPPLY USES, FRESH WATER - WAC 173-201A-200(3)

NON SUBSTANTIVE FORMATTING CHANGE in the July 2003 Water Quality Standards:

(3) Water supply uses. The water supply uses are domestic; agricultural, industrial, and stock watering.

(a) General criteria. General criteria that apply to the water supply uses are described in WAC 173-201A-260 (2)(a) and (b), and are for:

- (i) Toxic, radioactive, and deleterious materials; and
- (ii) Aesthetic values

EPA ACTION: EPA approves the water supply uses (i.e., domestic; agricultural, industrial, and stock watering) as a non-substantive formatting change that does not alter the uses of the water quality standards that EPA previously approved and that were in effect in the 1997 WQS. EPA is acting on this provision to ensure that the reformatted provision is in effect under the CWA.

As stated previously, the formatting used to assign beneficial uses to waters has been revised in the 2003 WQS. The 1997 WQS used a "Class" format which assigned each water body to a particular "Class." Each "Class" contained various water supply uses. Class AA, Class A, and Lake Class included domestic, agricultural, industrial, and stock water; and Class B included agricultural, industrial, and stock water. The 2003 WQS removed the "Class" system and instead directly applies the beneficial uses (i.e., domestic, agricultural, industrial, and stock water) that were contained in a "Class" to the water body.

EPA approves the general criteria in this provision (i.e., WAC 173-201A-200(3)(a)) as a non-substantive formatting change that does not alter the criteria of the water quality standards that EPA previously approved and that were in effect in the 1997 WQS. In the 1997 WQS these same general criteria were contained within each "Class." Since the reformatted 2003 WQS removed the "Class" format, these criteria are now directly associated with the use. EPA is approving this provision to ensure that the reformatted provision is in effect under the CWA.

## C. MISCELLANEOUS USES, FRESH WATER - WAC 173-201A-200(4)

NON SUBSTANTIVE FORMATTING CHANGE in the July 2003 Water Quality Standards:

(4) Miscellaneous uses. The miscellaneous freshwater uses are wildlife habitat, harvesting, commerce and navigation, boating, and aesthetics.

(a) General criteria. General criteria that apply to miscellaneous fresh uses are described in WAC 173-201A-260 (2)(a) and (b), and are for:

- (i) Toxic, radioactive, and deleterious materials: and
- (ii) Aesthetic values

ACTION: EPA approves the miscellaneous uses in this provision (i.e., wildlife habitat, harvesting, commerce and navigation, boating, and aesthetics) as a non-substantive formatting change that does not alter the uses of the water quality standards that EPA previously approved and that were in effect in the 1997 WQS. EPA is acting on this provision to ensure that the reformatted provision is in effect under the CWA.

As stated previously, the 1997 WQS used a "Class" format which assigned each water body to a particular "Class." Each "Class" contained the beneficial uses of wildlife habitat, harvesting, commerce and navigation, boating, and aesthetics, as well as associated criteria. The 2003 WQS removed the "Class" system and instead directly applies the beneficial uses (i.e., wildlife habitat, harvesting, commerce and navigation, boating, and aesthetics.) that were contained in a "Class" to the water body.

EPA approves the general criteria in this provision (i.e., WAC 173-201A-200(4)(a)) as a non-substantive formatting change that does not alter the criteria of the water quality standards that EPA previously approved. In the 1997 WQS these same general criteria were contained within each "Class." Since the reformatted 2003 WQS removed the "Class" format, these criteria are now directly associated with the use. EPA is approving this provision to ensure that the reformatted provision is in effect under the CWA.

# D. WAC 173-201A-200-600 TABLE 602, Recreational, Water Supply, and Miscellaneous use designations for water bodies

NON SUBSTANTIVE FORMATTING CHANGE in July 2003 Water Quality Standards:

The 2003 WQS contains Table 602 which lists fresh waters in the State of Washington and the designated uses that are applicable to the waters. Today's action deals only with 1) recreational use designations, 2)water supply use designations, and 3) miscellaneous use designations for waterbodies. EPA is **not** taking an action on **aquatic life** use designations at this time because EPA is still undergoing its review, which includes Tribal and ESA consultation, of these uses and criteria.

EPA ACTION: The State of Washington has revised the formatting of its standards so that the State now displays its use categories in a table and associates them with specific waterbodies, rather than associating specific waterbodies with a "Class" (containing these uses). In Table 602 (of WAC 173-201A-200-600) EPA approves the waterbodies and their associated use designations of (1) recreational uses (i.e., extraordinary primary contact, primary contact, or secondary contact); (2) water supply uses (i.e., domestic; agricultural, industrial, and stock watering); and (3) miscellaneous uses (i.e., wildlife habitat, harvesting, commerce and navigation, boating, and aesthetics). EPA approves these as non-substantive formatting changes that do not alter the uses of the water quality standards that EPA previously approved and that were in effect in the 1997 WQS. EPA is acting on these water quality standards to ensure that the reformatted provision is in effect under the CWA.

As stated previously, the formatting used to assign beneficial uses to waters has been revised in the 2003 WQS. The 1997 WQS used a "Class" format which assigned each water body to a particular "Class." Each "Class" contained a suite of beneficial uses (e.g., water supply uses, primary contact, secondary contact, boating, wildlife habitat, etc.). The 2003 WQS removed the "Class" system and instead directly applies the same beneficial uses that were contained in a "Class" to the water body. The recreational uses, water supply uses, and miscellaneous uses assigned to the waterbodies in Table 602 are the same uses found within the 1997 WQS "Class" format.

#### E. LAKE NUTRIENT CRITERIA - WAC 173-201A-230

NON SUBSTANTIVE FORMATTING CHANGE in July 2003 Water Quality Standards:

WAC 173-201A-230 Establishing lake nutrient criteria.

(1) The following table shall be used to aid in establishing nutrient criteria:

(<u>Table 230(1)</u>) The ecoregional and trophic-state action values for establishing nutrient criteria:

Coast Range, Puget Lowlands, and Northern Rockies Ecoregions:				
Trophic State	If Ambient TP (μg/L)	Then criteria should be set at:		
Ultra-oligotrophic	0-4	4 or less		
Oligotrophic	>4-10	10 or less		
Lower mesotrophic	>10-20	20 or less		
	Action level >20	lake specific study may be initiated.		

Cascade Ecoregion:				
Trophic State	If Ambient TP (µg/L)	Then criteria should be set at:		
Ultra-oligotrophic	olo latol 0-4 mas, in vibrazio tar	4 or less		
Oligotrophic	>4-10	10 or less		
7.11	Action level >10	lake specific study may be initiated.		

Columbia Basin Ecoregion:				
Trophic State	If Ambient TP (μg/L)	Then criteria should be set at:		
Ultra-oligotrophic	0-4	4 or less		
Oligotrophic	>4-10	10 or less		
Lower mesotrophic	>10-20	20 or less		
Upper mesotrophic	>20-35	35 or less		
ed unicenses as pot action, while trapped on its pot agent visiting	Action level >35	lake specific study may be initiated.		

Lakes in the Willamette, East Cascade Foothills, or Blue Mountain ecoregions do not have recommended values and need to have lake-specific studies in order to receive criteria as described in subsection (3) of this section.

- (2) The following actions are recommended if ambient monitoring of a lake shows the epilimnetic total phosphorus concentration, as shown in Table 1 of this section, is below the action value for an ecoregion:
  - (a) Determine trophic status from existing or newly gathered data. The recommended minimum sampling to determine trophic status is calculated as the mean of four or more samples collected from the epilimnion between June through September in one or more consecutive years. Sampling must be spread throughout the season.
  - (b) Propose criteria at or below the upper limit of the trophic state; or
  - (c) Conduct lake-specific study to determine and propose to adopt appropriate criteria as described in (c) of this subsection.
- (3) The following actions are recommended if ambient monitoring of a lake shows total phosphorus to exceed the action value for an ecoregion shown in Table 1 of this section or where recommended ecoregional action values do not exist:
  - (a) Conduct a lake-specific study to evaluate the characteristic uses of the lake. A

lake-specific study may vary depending on the source or threat of impairment. Phytoplankton blooms, toxic phytoplankton, or excessive aquatic plants, are examples of various sources of impairment. The following are examples of quantitative measures that a study may describe: Total phosphorus, total nitrogen, chlorophyll-a, dissolved oxygen in the hypolimnion if thermally stratified, pH, hardness, or other measures of existing conditions and potential changes in any one of these parameters.

- (b) Determine appropriate total phosphorus concentrations or other nutrient criteria to protect characteristic lake uses. If the existing total phosphorus concentration is protective of characteristic lake uses, then set criteria at existing total phosphorus concentration. If the existing total phosphorus concentration is not protective of the existing characteristic lake uses, then set criteria at a protective concentration. Proposals to adopt appropriate total phosphorus criteria to protect characteristic uses must be developed by considering technical information and stakeholder input as part of a public involvement process equivalent to the Administrative Procedure Act (chapter 34.05 RCW).
- (c) Determine if the proposed total phosphorus criteria necessary to protect characteristic uses is achievable. If the recommended criterion is not achievable and if the characteristic use the criterion is intended to protect is not an existing use, then a higher criterion may be proposed in conformance with 40 CFR 131.10.
- (4) The department will consider proposed lake-specific nutrient criteria during any water quality standards rule making that follows development of a proposal. Adoption by rule formally establishes the criteria for that lake.
- (5) Prioritization and investigation of lakes by the department will be initiated by listing problem lakes in a watershed needs assessment, and scheduled as part of the water quality program's watershed approach to pollution control. This prioritization will apply to lakes identified as warranting a criteria based on the results of a lake-specific study, to lakes warranting a lake-specific study for establishing criteria, and to lakes requiring restoration and pollution control measures due to exceedance of an established criterion. The adoption of nutrient criteria are generally not intended to apply to lakes or ponds with a surface area smaller than five acres; or to ponds wholly contained on private property owned and surrounded by a single landowner; and nutrients do not drain or leach from these lakes or private ponds to the detriment of other property owners or other water bodies; and do not impact designated uses in the lake. However, if the landowner proposes criteria the department may consider adoption.
- (6) The department may not need to set a lake-specific criteria or further investigate a lake if existing water quality conditions are naturally poorer (higher TP) than the action value and uses have not been lost or degraded, per WAC 173-201A-260(1).

[Statutory Authority: Chapters 90.48 and 90.54 RCW. 03-14-129 (Order 02-14), §§ 173-201A-230, filed 7/1/03, effective 8/1/03.]

**EPA ACTION:** EPA approves the lake nutrient criteria as a non-substantive formatting change that does not alter the criteria of the water quality standards that EPA previously approved and that were in effect in the 1997 WQS. EPA is acting on this provision to ensure that the reformatted provision is in effect under the CWA.

This provision contains minor revisions to the regulatory numbering, and added some regulatory citations.

#### F. RADIOACTIVE SUBSTANCES - WAC 173-201A-250

NON SUBSTANTIVE FORMATTING CHANGE in the July 2003 Water Quality Standards:

WAC 173-201A-250 Radioactive substances.

- (1) Deleterious concentrations of radioactive materials for all classes shall be as determined by the lowest practicable concentration attainable and in no case shall exceed:
  - (a) 1/12.5 of the values listed in WAC 246-221-290 (Column 2, Table II, effluent concentrations, rules and regulations for radiation protection); or
  - (b) USEPA Drinking Water Regulations for radionuclides, as published in the Federal Register of July 9, 1976, or subsequent revisions thereto.
- (2) Nothing in this chapter shall be interpreted to be applicable to those aspects of governmental regulation of radioactive waters which have been preempted from state regulation by the Atomic Energy Act of 1954, as amended, as interpreted by the United States Supreme Court in the cases of Northern States Power Co. v. Minnesota 405 U.S. 1035 (1972) and Train v. Colorado Public Interest Research Group, 426 U.S. 1 (1976).

[Statutory Authority: Chapters <u>90.48</u> and 90.54 RCW. 03-14-129 (Order 02-14), recodified as §§ 173-201A-250, filed 7/1/03, effective 8/1/03. Statutory Authority: Chapter 90.48 RCW and 40 CFR 131. 97-23-064 (Order 94-19), §§ 173-201A-050, filed 11/18/97, effective 12/19/97. Statutory Authority: Chapter 90.48 RCW. 92-24-037 (Order 92-29), §§ 173-201A-050, filed 11/25/92, effective 12/26/92.]

**EPA ACTION:** EPA approves the radioactive substances criteria as a non-substantive formatting change that does not alter the criteria of the water quality standards that EPA previously approved and that were in effect in the 1997 WQS. EPA is acting on this provision to ensure that the reformatted provision is in effect under the CWA.

This provision contains minor revisions to the regulatory numbering, and added some regulatory citations.

### **G. TOXICS AND AESTHETICS - WAC 173-201A-260(2)**

NON SUBSTANTIVE FORMATTING CHANGE in the July 2003 Water Quality Standards:

(2) Toxics and aesthetics criteria. The following narrative criteria apply to all existing and designated uses for fresh and marine water:

(a) Toxic, radioactive, or deleterious material concentrations <u>must</u> be below those which have the potential, either singularly or cumulatively, to adversely affect characteristic water uses, cause acute or chronic conditions to the most sensitive biota dependent upon those waters, or adversely affect public health (see WAC 173-201A-240, toxic substances, and 173-201A-250, radioactive substances).

(b) Aesthetic values <u>must</u> not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch, or taste (see WAC 173-201A-230 for guidance on establishing lake nutrient standards to protect aesthetics).

**EPA ACTION:** EPA approves the toxics and aesthetics criteria as a non-substantive formatting change that does not alter the criteria of the water quality standards that EPA previously approved and that were in effect in the 1997 WQS. EPA is acting on this provision to ensure that the reformatted provision is in effect under the CWA.

The two narrative criteria in this provision are the same as those applicable to all of the beneficial uses contained in the "Classes" in the 1997 WQS. The 2003 WQS continues to apply these narratives to all of the uses of a water body.

#### H. VARIANCE PROCEDURE

NEW LANGUAGE to the July 2003 Water Quality Standards: WAC 173-201A-420 Variance.

(1) The criteria established in WAC 173-201A-200 through 173-201A-260 may be modified for individual facilities, or stretches of waters, through the use of a variance. Variances may be approved by the department when:

- (a) The modification is consistent with the requirements of federal law (currently 40 CFR 131.10(g) and 131.10(h));
- (b) The water body is assigned variances for specific criteria and all other applicable criteria must be met; and
- (c) Reasonable progress is being made toward meeting the original criteria.
- (2) The decision to approve a variance is subject to a public and intergovernmental involvement process.

- (3) The department may issue a variance for up to five years, and may renew the variance after providing for another opportunity for public and intergovernmental involvement and review.
- (4) Variances are not in effect until they have been incorporated into this chapter and approved by the USEPA.

EPA ACTION: EPA approves Washington's provision for variances as consistent with the Clean Water Act and its implementing regulations at 40 CFR 131. The regulation at 40 CFR 131.13 indicates that states may, at their discretion, include policies such as variances, within their water quality standards that generally affect the application and implementation of the water quality standards. The policies are subject to EPA review and approval. EPA has determined that the factors Washington has identified for consideration when applying the variance provision are appropriate and generally consistent with EPA's guidance for variances (Water Quality Standards Handbook: Second Edition, August 1994, pg 5-12).

Washington's water quality standards allow for a variance for an individual facility or a stream segment. The basis for a variance are six use removal factors listed at 40 CFR 131.10(g). The first five factors address water quality and habitat features of the water body as a whole, and the sixth factor addresses substantial and widespread economic and social impact.

In general variances are applicable to individual discharges, however, as discussed in the Water Quality Standards Regulation; Advance Notice of Proposed Rulemaking (63 Federal Register, page 36760, July 7, 1998)) several States have applied factors similar to the first five use removal factors in establishing variances for stream segments. This has been done where the problems in a stream are significant and widespread, involving point and nonpoint sources of pollution and their impacts on water quality and habitat (i.e., waters significantly impaired by multiple sources and not just one or a few point sources). For example, where historic mining practices have severely impaired both water quality and habitat throughout a headwater basin, stream segment variances have been used. Rather than downgrading these waters, the States have applied stream segment variances with specific expiration dates for certain pollutants affected by the historic mining practices. In this way, the States have maintained designated uses and underlying criteria for other pollutants, while recognizing that existing ambient conditions for certain pollutants are not correctable in the short-term. In such cases, the stream segment variance provides a basis for permit limits in the short-term. The variance approach is then used by these States as the basis for remediation of damaged water resources because the underlying designated use and criteria to protect that use actively drive water quality improvements in the long-term. The stream segment variance provides a way of applying the use-based section 131.10(g) factors (i.e., factors 1 through 5) in a manner that makes sense and meets the objectives of the water quality standards variance policy.

Washington must submit each individual variance to EPA so that EPA can determine if it

complies with Section 303(c) of the CWA and its implementing regulations at 40 CFR 131. Consistent with 40 CFR 131.5 and 131.6, Washington's regulation states that the variance will not become the applicable criterion until EPA has approved it.

#### I. SITE SPECIFIC CRITERIA

# NEW LANGUAGE to the July 2003 Water Quality Standards: WAC 173-201A-430 Site-specific criteria.

- (1) Where the attainable condition of existing and designated uses for the water body would be fully protected using an alternative criterion, site-specific criteria may be adopted.
  - (a) The site-specific criterion must be consistent with the federal regulations on designating and protecting uses (currently 40 CFR 131.10 and 131.11); and
  - (b) The decision to approve a site-specific criterion must be subject to a public involvement and intergovernmental coordination process.
- (2) The site-specific analyses for the development of a new water quality criterion must be conducted in a manner that is scientifically justifiable and consistent with the assumptions and rationale in "Guidelines for Deriving National Water Quality Criteria for the Protection of Aquatic Organisms and their Uses," EPA 1985; and conducted in accordance with the procedures established in the "Water Quality Standards Handbook," EPA 1994, as revised.
- (3) The decision to approve the site-specific criterion must be based on a demonstration that it will protect the existing and attainable uses of the water body.
- (4) Site-specific criteria are not in effect until they have been incorporated into this chapter and approved by the USEPA.

EPA ACTION: EPA approves Washington's provision for site specific criteria because it is consistent with the requirements of the Section 303(c) of Clean Water Act, and its implementing regulations at 40 CFR 131. The regulation at 40 CFR 131.11 (b)(1)(ii) provides that states may adopt water quality criteria that are "...modified to reflect site-specific conditions." Site-specific criteria must be based on a sound scientific rationale in order to protect the designated use(s). EPA had determined that the factors Washington has identified for consideration when calculating a site-specific criterion are generally appropriate for development of a scientifically-defensible site-specific criterion. Washington must submit each individual site-specific criterion to EPA so that EPA can determine if it complies with Section 303(c) of the CWA and its implementing regulations at 40 CFR 131. Consistent with 40 CFR 131.5 and 131.6, Washington's regulation states that the site-specific criterion will not become the applicable criterion until EPA has approved it.

#### J. USE ATTAINABILITY ANALYSIS

# NEW LANGUAGE to the July 2003 Water Quality Standards: WAC 173-201A-440 Use attainability analysis.

- (1) Removal of a designated use for a water body assigned in this chapter must be based on a use attainability analysis (UAA). A UAA is a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors. A use can only be removed through a UAA if it is not existing or attainable.
- (2) A UAA proposing to remove a designated use on a water body must be submitted to the department in writing and include sufficient information to demonstrate that the use is neither existing nor attainable.
- (3) A UAA must be consistent with the federal regulations on designating and protecting uses (currently 40 CFR 131.10).
- (4) Subcategories of use protection that reflect the lower physical potential of the water body for protecting designated uses must be based upon federal regulations (currently 40 CFR 131.10(c)).
- (5) Allowing for seasonal uses where doing so would not harm existing or designated uses occurring in that or another season must be based upon federal regulations (currently 40 CFR 131.10(f)).
- (6) After receiving a proposed UAA, the department will respond within sixty days of receipt with a decision on whether to proceed toward rule making.
- (7) The decision to approve a UAA is subject to a public involvement and intergovernmental coordination process, including tribal consultation.
- (8) The department will maintain a list of federally recognized tribes in the state of Washington. During all stages of development and review of UAA proposals, the department will provide notice and consult with representatives of the interested affected Indian tribes on a government-to-government basis, and carefully consider their recommendations.
- (9) The results of a UAA are not in effect until they have been incorporated into this chapter and approved by the USEPA.

EPA ACTION: EPA approves Washington's provision for Use Attainability Analysis because it is consistent with the requirements of Section 303(c) of the Clean Water Act, and its implementing regulations at 40 CFR 131. The regulation at 40 CFR 131.10 (g) allows states to remove a designated use, that is not an existing use, if they can demonstrate that attaining the use is infeasible. The regulation at 40 CFR 131.10 identifies the factors that must be considered in making such a demonstration. As explained in the regulation, existing uses, by definition, are attainable and must be

protected by designated uses in water quality standards (40 CFR 131.10(h)(1), 131.10(i) and 131.12(a)(1)). Furthermore, at a minimum, uses are considered attainable if they can be achieved by implementing effluent limits required under Sections 301(b) and 306 of the Clean Water Act and by implementing cost-effective and reasonable best management practices for nonpoint source control (40 CFR 131.10(h)(2)).

EPA has determined that the factors Washington has identified for consideration when applying the Use Attainability Analysis provision are consistent with EPA regulations. Washington must submit each individual Use Attainability Analysis to EPA so that EPA can determine if it complies with Section 303(c) of the CWA and its implementing regulations at 40 CFR 131. Consistent with 40 CFR 131.5 and 131.6, Washington's regulation states that the site-specific criterion will not become the applicable criterion until EPA has approved it. EPA lauds Ecology's choice to incorporate tribal consultation into its UAA process.

### K. WATER QUALITY OFFSETS

# NEW LANGUAGE to the July 2003 Water Quality Standards: WAC 173-201A-450 Water quality offsets.

- (1) A water quality offset occurs where a project proponent implements or finances the implementation of controls for point or nonpoint sources to reduce the levels of pollution for the purpose of creating sufficient assimilative capacity to allow new or expanded discharges. The purpose of water quality offsets is to sufficiently reduce the pollution levels of a water body so that a proponent's actions do not cause or contribute to a violation of the requirements of this chapter and so that they result in a net environmental benefit. Water quality offsets may be used to assist an entity in meeting load allocations targeted under a pollution reduction analysis (such as a total maximum daily load) as established by the department. Water quality offsets may be used to reduce the water quality effect of a discharge to levels that are unmeasurable and in compliance with the water quality antidegradation Tier II analysis (WAC 173-201A-320).
- (2) Water quality offsets may be allowed by the department when all of the following conditions are met:
  - (a) Water quality offsets must target specific water quality parameters.
  - (b) The improvements in water quality associated with creating water quality offsets for any proposed new or expanded actions must be demonstrated to have occurred in advance of the proposed action.
  - (c) The technical basis and methodology for the water quality offsets is documented through a technical analysis of pollutant loading, and that analysis is made available for review by the department. The methodology must incorporate the uncertainties associated with any proposed point or nonpoint source controls as well as variability in effluent quality for sources, and must demonstrate that an

appropriate margin of safety is included. The approach must clearly account for the attenuation of the benefits of pollution controls as the water moves to the location where the offset is needed.

- (d) Point or nonpoint source pollution controls must be secured using binding legal instruments between any involved parties for the life of the project that is being offset. The proponent remains solely responsible for ensuring the success of offsetting activities for both compliance and enforcement purposes.
- (e) Only the proportion of the pollution controls which occurs beyond existing requirements for those sources can be included in the offset allowance.
- (f) Water quality offsets must meet antidegradation requirements in WAC 173-201A-300 through 173-201A-330 and federal antibacksliding requirements in CFR 122.44(l).

EPA ACTION: EPA is not taking action on this provision as it is not a water quality standard that falls under the scope of section 303(c) of the CWA. This provision does not change the level of protection afforded to Washington's waters; it does not establish any new uses or criteria. Rather it identifies activities for establishing source controls to achieve the standards. These activities are aimed at TMDL development and NPDES implementation. However, EPA does support the concept of water quality trading and finds that Washington's language is consistent with EPA's 2003 Water Quality Trading Policy.

#### III. ENDANGERED SPECIES ACT/ESSENTIAL FISH HABITAT CONSULTATION

Services, ensure that their actions are not likely to jeopardize the continued existence of federally listed species or result in the adverse modification of designated critical habitat of such species. The Magnuson-Stevens Act requires federal agencies to consult with the National Marine Fisheries Service (Service) on any actions authorized, funded, or undertaken by the agency that may adversely affect essential fish habitat (EFH) identified by Regional Fishery Management Councils.

EPA is not consulting on the following provisions: II. A. 1, 2, and 4; II. B; II.C.; II.D.; II.E.; II.F; and II.G. EPA does not consult on water quality standards where it does not undergo a substantive CWA review because the uses and criteria of the water quality standards have not changed. As stated previously, EPA approved these format and editorial changes to the water quality standards so that they could be used within the context of Washington's new formatting system. Because there is no substantive change to the water quality standard there is no effect to endangered or listed species and no adverse effect to essential fish habitat.

EPA has determined that the approval of the variance provision (see II.H.), use attainability analysis provision (see II.J.), and site specific criteria provision (see II.I.) will not result in a change to the water quality standards until the provision is actually applied. Since, the

water quality standard will not change until the provision is applied and then approved by EPA, EPA has determined that its approval of these process provisions will have no effect on endangered or listed species, or their habitat. The effect of provisions (on ESA listed species) when applied (e.g., variances, use attainability analysis, and site specific criteria) will be consulted on when EPA approves a specific action.

EPA is not consulting on its approval of the revised numeric bacteria criteria for recreational uses (see II.A.3) because this criterion is developed and designed for the protection of human health. The exposure assumptions and toxicological information used in the derivation of these human health criteria are specific to humans and have no predictive application for aquatic life. EPA's approval of this provision will have no effect on endangered or listed species and no adverse effect on essential fish habitat.